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STAFF EVALUATION OF PETITION

Introduction

On August 15, 2002, the Occupational Safety and Health Standards Board (Board) received a petition dated August 7, 2002 from Mr. Tom Rankin, President of the California Labor Federation, AFL-CIO (Petitioner). The Petitioner requested that the Board amend Title 8, California Code of Regulation, Section 5110 of the General Industry Safety Orders, concerning repetitive motion injuries (ergonomics). On September 19, 2002, at the Public Meeting in Oakland, CA, the Petitioner presented the Board with an addendum to Petition 448.

Labor Code Section 142.2 permits interested persons to propose new or revised regulations concerning occupational safety and health and requires the Board to consider such proposals and to render its decision no later than six months following their receipt. In accordance with Board policy, the purpose of this evaluation is to provide the Board with relevant information upon which to base a reasonable decision.

History

In 1993, Assembly Bill 110, a part of the 1993 worker's compensation insurance legislative reform, added a new Section 6357 to the Labor Code, which required the Board to adopt a standard "to minimize instances of injury from repetitive motion" by January 1995. In November of 1994, after two large public hearings and the submission of over 6,500 written comments, the Standards Board voted down a proposed ergonomics standard developed by the Division using a public advisory committee process.

In response to a lawsuit filed against the Board in January 1995, the Superior Court in Sacramento, California ordered the Board to develop and adopt a standard that complied with Section 6357 by December 1996. In January 1996, the Board held two public hearings on a proposed repetitive motion standard. The Board adopted the standard in November 1996; and, following approval by the Office of Administrative Law, Section 5110 became legally enforceable July 3, 1997. Business and Labor interests promptly challenged the regulation on a number of grounds in court. In October 1999, following protracted litigation, the California Court of Appeal upheld the regulation with one exception. Specifically, the court struck the regulatory exemption for employers with less than ten employees.

In November 1999, federal OSHA introduced a proposed ergonomics standard, 29 CFR 1910.900, known as the Ergonomics Program Standard. The federal standard was finalized in November 2000 and became effective on January 16, 2001. The standard was immediately challenged in court and generated over thirty lawsuits. In March 2001, Congress, for the first time, passed a Joint Resolution of Disapproval under the Congressional Review Act and repealed the federal standard. President Bush signed the Joint resolution on March 29, 2001.

In 1999, as part of Assembly Bill 1127, the Legislature enacted Labor Code Section 6719, which reads as follows: "The Legislature reaffirms its concern over the prevalence of repetitive motion injuries in the workplace and reaffirms the Occupational Safety and Health Standards Board's continuing duty to carry out Section 6357."

In February 2001, prior to Congress repealing the federal standard, the California Labor Federation submitted a request to the Board to revise Section 5110 to incorporate the elements of the former federal Ergonomics Program Standard, 29 CFR 1910.900. In July 2001, after considering the petition and the recommendations of the Division and Board staff, the Board concluded that the federal model did not offer a sound approach for revising California's ergonomic standard and denied the petition.

In February 2002, AB 2845 was introduced to amend Section 6357 of the Labor Code to require the Board to adopt revised standards for ergonomics in the workplace designed to minimize the instances of injury from repetitive motion by July 1, 2003. In September 2002, Governor Davis vetoed the Bill in an effort to allow the Board the opportunity to consider Petition 448 and evaluate the existing regulation as well as the merits of amending it.

Reason for the Petition

Petitioner believes that the current Section 5110 is not preventive, is difficult to enforce, and has failed to "minimize the instances of injury from repetitive motion", as mandated by Section 6357. Specifically, the Petitioner requests the Board to convene an advisory committee to: 1) review the standard proposed by the Division and rejected by the Board in November 1994; or, 2) review the Petitioner's proposed revisions to current Section 5110 submitted at the September 19, 2002 Board Meeting.

Federal OSHA Standards

In March 2001, Congress passed a Joint Resolution of Disapproval under the Congressional Review Act (CRA) and repealed the federal OSHA Ergonomics Program Standard, 29 CFR 1910.900, promulgated on November 14, 2000. Federal OSHA immediately notified the States of the cancellation of OSHA's requirement for States to adopt an Ergonomics Program Standard comparable to the federal standard.

Before Federal OSHA can proceed with any post-CRA rulemaking that is substantially the same, the CRA requires that Congress write an "ergonomics rulemaking prescription" for OSHA to follow. Although Congress has not passed legislation containing elements of an ergonomics prescription, such legislation has been introduced and Congress could move toward additional ergonomics rulemaking in the near future. Meanwhile, OSHA announced plans to reduce ergonomic injuries through a combination of voluntary industry-targeted guidelines and use of the general duty clause for enforcement actions.

Summary

I. Petition 448

The Petitioner presented the Board with two options for proceeding to address Petition 448. The first option is to convene an advisory committee to review the ergonomic proposal that was developed by the Division and rejected by the Board at the November 1994 Board meeting. Recognizing that this proposal could result in a lengthy process involving a great deal of staff time before a recommendation could be put before the Board and the public for hearing, the Petitioner provided a second option.

The second option is to convene an advisory committee to examine specific aspects of the existing standard and consider the proposed revised Section 5110 submitted by the Petitioner. The Petitioner asserts that this can be accomplished with one, or at most two, advisory committee meetings with the committee reporting back to the Board before the end of the year. The Petitioner proposes the committee review issues that, it contends, contradict the statutory requirement for a standard "designed to minimize the instances of injury from repetitive motion" and which make enforcement of the standard extremely difficult. These issues include: the requirement that two workers report specified repetitive motion injuries within twelve months before the standard is triggered; and, the provision allowing employers to avoid citations by claiming that known prevention and control measures they chose not to implement imposed "additional unreasonable costs" or are not "substantially certain to cause a greater reduction in such injuries".

Board staff agrees with the Petitioner that, based on past experience, use of the Division's 1994 proposed standard as a model for developing an ergonomics proposal is likely to result in a lengthy process that consumes an inordinate amount of Division and Board resources. The Division's 1994 proposal was the subject of two lengthy public meetings, generated over 6,500 written comments, and was strongly opposed by business interests. Despite the commitment of Division and Board resources to develop a proposal, and a statutory mandate to adopt an ergonomics standard, the Board declined to adopt the proposed standard after considering public comments.

Board staff recommends that the objectives expressed in Petition 448 can be better served by addressing the issues raised by the Petitioner in relation to the proposed revisions to existing Section 5110 (i.e. option No. 2 of the petition). The current standard has been approved by the Office of Administrate Law in respect to compliance with the

Administrative Procedure Act, and has been tested in the courts and found to meet the statutory requirements of Section 6357. For the above reasons, the existing Section 5110 standard is a better model for considering changes than is the rejected 1994 proposal, and therefore Board staff recommends proceeding with an evaluation of Petition 448 by addressing the second option proposed by the Petitioner.

II. Injury and Enforcement Statistics

The Petitioner asserts that the current ergonomics standard is not working and the Board has failed its duty to adopt a standard "designed to minimize the instances of repetitive motion" as mandated by Labor Code Section 6357 and Section 6719. The Petitioner cites the following examples as evidence of the current standard's ineffectiveness. First, the Division's own analysis is that there has been no sustained downward trend in cases of repeated trauma disorders. Secondly, as of last year, two-thirds of all the Cal/OSHA ergonomics complaint-triggered investigations resulted in no citations because there was no qualifying second injury. Finally, the Workers' Compensation Insurance Rating Bureau of California reported 6,660 carpal tunnel syndrome permanent disability claims in 1999 alone, for a cost of $290 million.

Bureau of Labor Statistics Data

In the first example cited above, the Petitioner appears to be referring to an analysis of U.S. Bureau of Labor Statistics (BLS) data included in the Division's evaluation of Petition 430 in June 2001. The Division's report states:

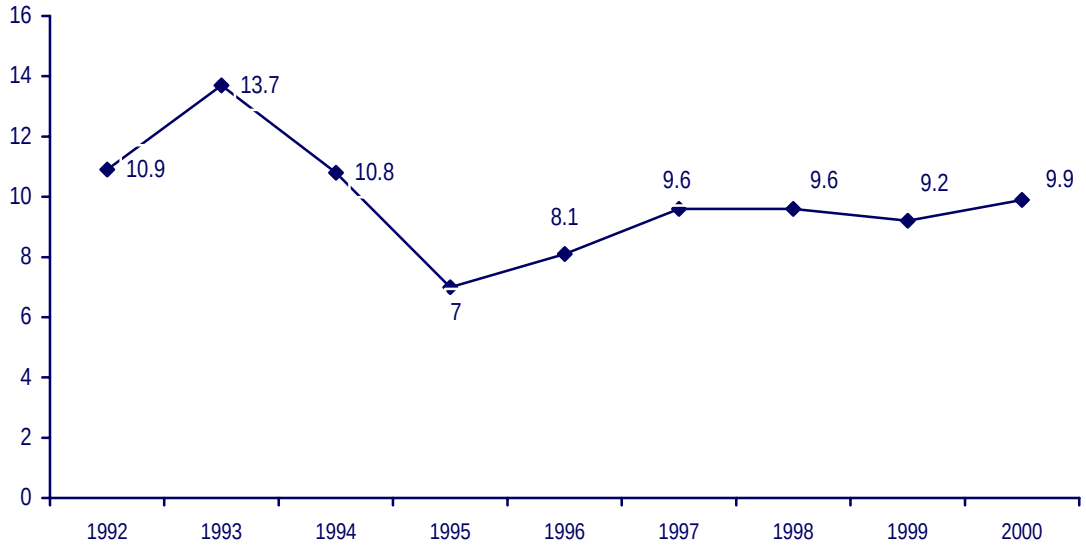
> *" Looking at the number of cases of Repeated Trauma Disorders since 1982, the steep rise in cases began to plateau in 1995 and has remained relatively constant during the last four years, fluctuating around the figure of 32,000 cases per year. No sustained downtrend in cases of Repeated Trauma Disorders has been discerned in California as yet."*

The most recent data from the 2000 BLS survey shows the number of disorders associated with repeated trauma increased to 34,200 in 2000. According to the BLS data the number of repeated trauma disorders increased approximately 6% between 1997, the year the ergonomics standard was adopted, and 2000. Business interests contend that the rate of RMIs actually decreased from 1997 to 2000 due to the increase in California employment during this period. Employment and Development data shows that the civilian work force increased approximately 9% between 1997 and 2000.

At the Board's request, the Division convened a work group of Labor and Management representatives and ergonomic experts as part of the Petition evaluation. At the work group meeting on November 15, 2002 in Oakland, Division staff presented information concerning RMI incidence rate statistics, Cal/OSHA Consultation experience, and Cal/OSHA enforcement experience.

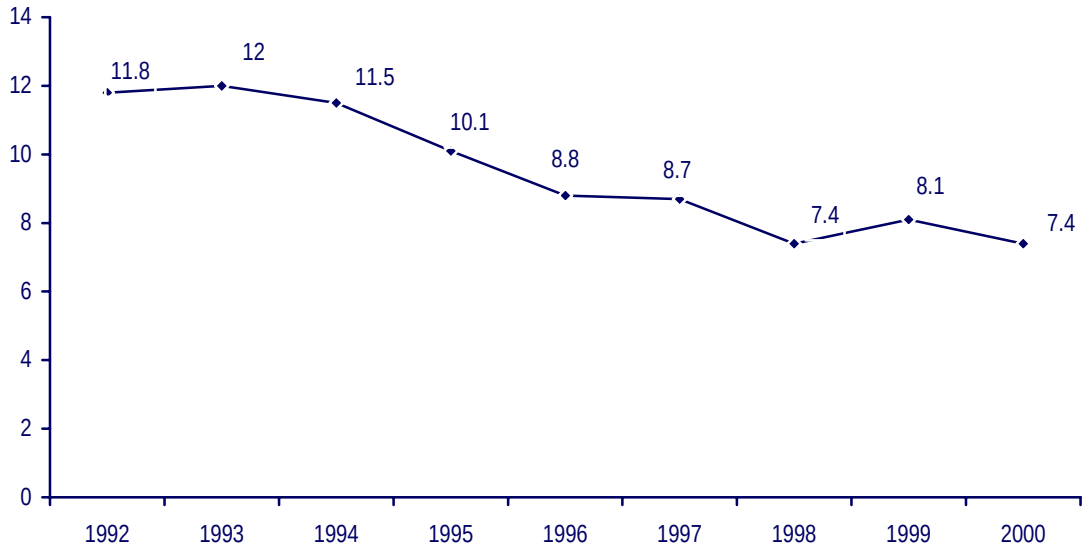
Division staff presented the following graph of RMI rates in the California private sector from 1992 to 2000. Unlike the above BLS statistics representing the total number of RMIs reported each year, these RMI incidence rate statistics are not affected by changes in the size of the workforce because they represent the number of injuries per 10,000 employees.

Incidence per 10,000 full-time employees:
Cases with days away from work due to repetitive motion
California Private Sector 1992-2000
(Source: Bureau of Labor Statistics Annual Survey)



It should be noted that there are many factors that can potentially influence RMI incident rates, such as: increased awareness, "over-reporting / under-reporting", voluntary ergonomic programs, OSHA enforcement activities, OSHA consultation activities, changes in workers' compensation laws, changes in work force demographics, economic factors, number of workers performing repetitive activities, and changes in the kind of repetitive activities workers perform. A change in RMI rates cannot be attributed with certainty to any one factor alone, including the adoption of Section 5110. It should also be noted that an analysis of data spanning several years is generally a better indicator of a trend than observing data over a relatively short time span covering only a few years. There is a significant degree of uncertainty involved in any attempt to draw conclusions regarding injury trends, or the effectiveness of Section 5110, from RMI rates, especially from three or four years of data. To illustrate this point, a comparison of the California RMI rates presented above with the United States RMI rates presented below, is useful.

Incidence per 10,000 full-time employees:
Cases with days away from work due to repetitive motion
United States Private Sector 1992-2000
(Source: Bureau of Labor Statistics Annual Survey)



Since 1992 the United States RMI rates have declined every year except 1993 and 1999. These data demonstrate a sustained downtrend in RMI rates. In contrast, in California, the only state with a RMI standard, the RMI rates over the same time period do not demonstrate a similar sustained downtrend. The California RMI rates have tended to vary up and down every year or two, demonstrating the uncertainty involved with identifying injury trends from a few years' data. The absence of a downtrend in RMIs in California could be read to support the Petitioner's argument that Section 5110 needs to be strengthened, however the sustained decline of RMIs in the other states, which do not have a RMI regulation, indicates that a strong RMI regulation may not be the determining factor in reducing RMI rates. The uncertainties involved in discerning trends in RMI rates from a few year's data and the unknown effect of factors other Section 5110 on RMI rates, make it unlikely that much more will be learned about the effectiveness of Section 5110, or the necessity to revise it, by waiting a few more years to gather more RMI statistics, as was suggested at a recent Board meeting. Perhaps data appropriate to the enforcement of Section 5110 need to be identified and collected before its effectiveness can be measured.

Workers' Compensation Insurance Rating Bureau Statistics

According to the Petitioner, the Workers' Compensation Insurance Rating Bureau of California (Bureau) reported 6,660 carpal tunnel syndrome permanent disability claims in 1999 alone, for a cost of $290 million.

Board staff contacted the Bureau and, according to Bureau staff, the July 10, 2002 Bureau Bulletin summarizing loses and expenses for 1999 reported, under cause of accident, 7,555 claims for strains or injuries from "repetitive motion (carpal tunnel syndrome)" for a cost of $227,568,921. Also reported for 1999, under nature of injury, were 2,634 claims for "carpal tunnel syndrome" with a cost of $84,342,601. According to Bureau staff, it is likely that most of the 2,634 claims identifying carpal tunnel syndrome as the nature of the injury are included in the 7,555 claims identifying "repetitive motion (carpal tunnel syndrome)" as the cause of the injury. It should be noted that the above data includes claims that may later be denied for various reasons.

Business interests contend that the costs of rapidly increasing workers' compensation insurance premiums are sufficient incentive for employers to implement programs to address RMIs. In response, advocates for the petition assert that increased claims costs are not passed on to small employers because their rates are not adjusted for experience modification. Along with the BLS statistics previously discussed, the claims information is of interest in that it suggests that RMIs can have a significant economic impact as well as an impact on worker health, and merit continued attention.

Division Enforcement Statistics

The Petitioner asserts that enforcement of Section 5110 is extremely difficult and that, as of last year, an estimated two-thirds of all Cal/OSHA complaint-triggered ergonomics investigations resulted in no citations because there was no qualifying second injury. At the October 17, 2002 Board meeting and the November 15, 2002 work group meeting, the Division presented a summary of Division enforcement procedures and statistics related to Section 5110. The Division estimates that 360 RMI related inspections have been conducted since Section 5110 became effective on July 3, 1997. Of these, 58 (16 percent) resulted in citations for 5110. The Division report did not indicate how many of these inspections were complaint-triggered or the reason(s) citations were not issued. From the Division's report, it is not possible to confirm the Petitioners assertion that the absence of a second qualifying injury caused no citations to be issued in two thirds of the inspections.

Another reason for not citing Section 5110 could be that there was no qualifying first injury, or, the employer may have complied with the provisions in subsection (b) and subsection (c). The Division's procedures for enforcement of Section 5110 instruct the compliance officer to issue an Information Memorandum to employers when there is no qualifying second RMI. Division staff reported that their record review of Section 5110 related inspections in the San Francisco and San Bernardino offices shows that twelve

complaint-triggered ergonomic inspections resulted in the issuance of three Information Memorandums. This very limited data suggests that in approximately one-fourth of Cal/OSHA complaint-triggered ergonomics investigations there was no qualifying second injury and citations could not be issued, however, it is not known if this is the reason citations were not issued in all of these inspections since some of these employers may have complied with the provisions in subsections (b) and (c).

III. Petitioner's Proposed Revisions to Section 5110

Subsection (a) Scope and Application.

Current subsection (a), Scope and Application, states, "This section shall apply to a job, process, or operation where a repetitive motion injury (RMI) has occurred to more than one employee under the following conditions". The conditions specified in the four subsections under subsection (a) relate to: work-related causation, relationship between RMIs at the workplace, medical diagnosis, and time requirements. The provisions of subsection (a) are commonly referred to as "the two-injury trigger". The Petitioner proposes to eliminate the two-injury trigger so that the requirements of Section 5110 will apply to all employers.

The Petitioner asserts the revision is necessary because the present provisions make the standard difficult to enforce and are not "designed to minimize the instances of repetitive motion" as mandated by Labor Code Section 6357 and Section 6719. Business interests argue that the provisions in subsection (a) are necessary, in part, because multiple factors, including non-work related activities, can cause RMIs, and it is burdensome and ineffective to require the employer to implement controls in the workplace when the injury is caused by outside factors.

The scientific information reviewed by the Board during the rulemaking process, beginning in 1994 with the Division's first ergonomics proposal and ending in 1997 with the adoption of the current standard, confirms the problematic nature of identifying RMIs as work related. Strongly held opinions on both sides of the issue came to different conclusions about whether there was a measurable cause and effect relationship between work tasks and RMIs. However, there was general agreement that RMIs can be caused by many factors, including factors that are not work related.

The California Court of Appeal in Pulaski v. Occupational Safety and Health Standards Board states the following. "We do not read the statutory directive to minimize RMI's as a mandate to overwhelm employers with regulation regardless of how burdensome or costly corrective measures might be. The Administrative Procedure Act requires agencies to assess the economic impact of proposed regulations on business, including the ability of businesses to compete with those in other states."

Comments regarding the costs and benefits of regulatory measures to prevent RMIs in the work place are as varied as comments regarding the cause of RMIs. As a result of prior

ergonomics rulemaking efforts and in response to this petition, the Board received comments from labor interests that a strong regulatory approach to ergonomics will save money by increasing productivity, reducing workers' compensation costs, and reducing other costs associated with lost work time injuries. On the other hand, business interests assert that voluntary ergonomic approaches are more effective than government imposed regulation, that regulations are especially costly to small employers, and that workers compensation costs provide adequate incentive for employers to control RMIs.

In developing Section 5110 the Board attempted to strike a balance between the potential economic burden on the employer and the gray area often surrounding causation of RMI injuries. The two-injury trigger is an important element in providing that balance by controlling employer costs for non-work related injuries and focusing mandatory preventive measures where they are most likely to be effective. Eliminating the two-injury trigger entirely, as the Petitioner proposes, could, without some control mechanism inplace, increase employer costs without substantially reducing RMIs.

Subsection (b) Program designed to minimize RMIs.

Existing subsection (b) requires employers to implement a program, designed to minimize RMIs, which includes a worksite evaluation, exposure controls, and employee training. Existing subsection (b) only applies when the conditions of the two-injury trigger are satisfied. The Petitioner's proposed revisions to subsection (b) reflect the proposed changes to subsection (a) that eliminate the two-injury trigger. The proposal requires that all employers implement the provisions of subsection (b) when exposures "may" cause RMIs, rather than when exposures "have" caused RMIs, as the current standard reads.

The above discussion of the two-injury trigger, including the issues surrounding costs and benefits and the cause of RMIs, as well as the arguments for and against the two-injury trigger, also applies to proposed subsection (b). In addition, it should be noted that the effect of the proposed revisions is to make it much less clear to the employer how to comply with the provisions of this subsection. For example, the Petitioner's proposed subsection (b)(2) requires the employer to correct any exposures that may cause RMIs. It is not clear what the employer's obligation is under this provision.

Subsection (c) Satisfaction of an employer's obligation.

Existing subsection (c) provides that a measure the employer implements to comply with subsection (b) shall meet the employer's obligation under that subsection unless there is an alternative measure known to the employer that is substantially certain to cause a greater reduction in such injuries and does not impose additional unreasonable costs. The provisions of subsection (c) are sometimes referred to as the "safe harbor". The Petitioner proposes to eliminate the existing provisions in subsection (b) and add language to make specific that the employer is required to address RMI risk by the Injury and Illness Prevention Program mandated by Section 3203. The Petitioner asserts that the revision is

necessary, in part, because the current provisions place an unreasonable burden of proof on the Division and make the standard difficult to enforce.

There is a general consensus among medical and ergonomic experts that there are multiple risk factors associated RMIs. There is less agreement on whether the quantitative relationship between these risk factors and RMIs is fully understood. These aspects of RMIs make it difficult to regulate exposures associated with RMIs. Subsection (b), in part, requires the employer to evaluate worker exposures that have caused RMIs and to implement engineering and administrative measures to control such exposures to the extent feasible. Subsection (b) does not specify or quantify the measures that are sufficient to comply with this subsection. Subsection (b) also does not clearly limit the employer's obligation to implement feasible controls. This is accomplished by subsection (c), which also helps clarify to the employer when they have satisfied their obligations under Subsection (b). Eliminating subsection (c) could, as business interests assert, expose employers to the burden of implementing costly, unproven, and ineffective control measures.

Labor interests contend that subsection (c) provides a disincentive for employers to evaluate potential engineering and administrative controls because the employer is only obligated to implement the controls that are known to the employer. They also assert that many engineering controls are proven to be cost effective. It is the opinion of Board staff that this issue merits further investigation. It might be useful to compare the Division's enforcement experience with noise controls or other mandated engineering controls.

The Petitioner's proposal adds language to make specific that the employer is required to address RMI risk through the Injury and Illness Prevention Program mandated by Section 3203. Briefly stated, Section 3203 requires, in part, that the employer implement a program to recognize, evaluate and control work place hazards. The application of Section 3203 to RMIs was mentioned as part of the discussion of Section 5110 at the November work group meeting and recent Board meetings. Although there were different opinions expressed on this issue, it was not discussed in depth, and it appears that further investigation is needed in order to reach a conclusion on the merits of this proposal.

IV. Division Enforcement Experience

At the October Board meeting and the November work group meeting Division staff reported on the Division's experience enforcing Section 5110. The Division's presentation characterized several challenges in establishing the two-injury trigger, which are summarized below. These are related to the conditions in subsection (a) and each of its four subsections. The most problematic issues appeared to be related to the conditions that the RMIs be reported to the employer, be predominantly caused (i.e. > 50%) by a repetitive operation, and be musculoskeletal injuries diagnosed by a licensed physician. Division staff reported that injured employees often do not go to a licensed medical doctor. When employees get treatment, they usually go to a chiropractor or physical therapist. When employees do go to a MD, the MDs do not describe the injury as a

"repetitive motion injury predominantly caused by work"; or, the injured employees do not report the injury to their employer or initiate a workers compensation claim, which would notify the employer of the injury. The under reporting of RMIs was discussed at the work group and Board meetings. Individuals supporting Petition 448 commented that employees often do not report RMIs or file workers' compensation claims because they fear reprisal, especially in industries like the garment industry, and that these same workers do not have access to medical doctors.

The measures for establishing that an RMI is predominantly caused by work, as required by Section 5110(a)(1), were also discussed at the work group and Board meetings. Different opinions were expressed on this issue and it appears that further investigation is needed in order to reach a conclusion as to what measures satisfy this provision

Another enforcement challenge characterized by Division staff is the legal requirements surrounding the confidentiality of medial information. Division staff reported that it is necessary to review employee medical records or the Doctor's First Reports of Occupation Injury or Illness to establish that the two-injury threshold is satisfied. Since it may be necessary to disclose this information during an appeal, it is the Division's policy to obtain a signed medical release from the employee. To review this medical information the Division relies on four medical staff persons to obtain the necessary information. At the November work group meeting, Dr. Robert Harrison, from the UCSF Medical Center also raised a medical confidentiality issue that could pose a significant impediment to enforcement of Section 5110. Dr. Harrison questioned how an employer knows that there are two RMIs that could trigger Section 5110. Dr. Harrison stated that he currently provides employers with only the recommended work modifications for an employee. He does not disclose an employee's diagnosis to their employer. According to Dr. Harrison, legislation that becomes effective in 2003 prohibits physicians from providing employers with a medical diagnosis concerning an employee without the employee's consent.

Business interests take exception to some of what the Division presented in their presentations on enforcement experience and suggested that perhaps the problem is not with the standard, but with the emphasis with which the Division takes with respect to enforcement priorities. For example, the Division has, in recent times, emphasized enforcement activities in the garment, agricultural and construction industries.

It is Board staff's opinion that the above issues do merit further consideration by an advisory committee to determine whether or not Section 5110 can be improved. Additional information should be obtained regarding medical reports, injury reporting, workers compensation practices, and confidentiality issues. Section 5110 should also be reviewed to determine that the information necessary to satisfy the two-injury trigger is available to the employer and the Division by practical means that do not violate medical confidentiality laws. If the required information is not available, then alternatives should be explored.

Recommendation

Staff recommends that the petition be **GRANTED** to the extent that the Division should convene a representative advisory committee for the purpose of addressing the issues presented in Petition 448. The Petitioner should be extended an invitation to participate in the advisory committee. The advisory committee should not attempt a quick fix but should gather statistical, scientific, and medical information to support the necessity for any proposed changes to Section 5110 and to assess their costs and benefits. This should be done to ensure compliance with the Administrative Procedure Act as well as Labor Code provisions. Any amendments to Section 5110 should have a sound basis for change. The committee should also consider administrative alternatives to improve enforcement of existing Section 5110, and should explore the employer's obligation to address RMIs under Section 3203.